User Manual DCT08D00893BE

Industrial Monitor

8″ Color LCD
Code No.: CL0883BR
Part Number: DCT08D00893BE
REV: A0

0600883705

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1. SAFETY SYMBOLS & PRECAUTIONS

1.1. Safety Symbols

This manual uses the safety symbols below. They denote critical information. Please read them carefully.

⚠	**WARNING** Failure to abide by the information in a WARNING may result in serious injury and can be life threatening.
⚠	**CAUTION** Failure to abide by the information in a CAUTION may result in moderate injury and/or property or product damage.
ϟ	Alert electrical hazard.
⊘	Indicates a prohibited action.
⏚	Indicates to ground for safety.

1.2. Precautions

To ensure personal safety and proper maintenance, please read this section and the caution statements on the unit

⚠WARNING

If the unit begins to emit smoke, smells like something is burning, or makes strange noises, disconnect all power connections immediately and contact your dealer for advice.

Attempting to use a malfunctioning unit may result in fire, electric shock, or equipment damage.

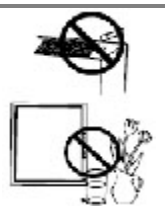
Do not open the cabinet or modify the unit.

Opening the cabinet or modifying the unit may result in fire, electric shock, or burn.

Refer all servicing to qualified service personnel.

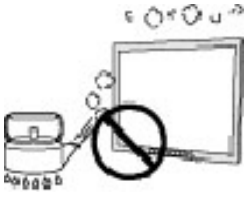
Do not attempt to service this product yourself as opening or removing covers may result in fire, electric shock, or equipment damage.

Keep small objects or liquids away from the unit.



Small objects accidentally falling through the ventilation slots into the cabinet or spillage into the cabinet may result in fire, electric shock, or equipment damage. If an object or liquid falls/spills into the cabinet, unplug the unit immediately. Have the unit checked by a qualified service engineer before using it again.

Set up the unit in an appropriate location.



Not doing so may result in fire, electric shock, or equipment damage.

- Do not place the unit outdoors.
- Do not install the unit in transportation systems (ship, aircraft, trains, automobiles, etc.)
- Do not place the unit in a dusty or humid environment.
- Do not place the unit in a location where the steam comes directly on the screen.
- Do not place the unit near heat generating devices or a humidifier.
- Do not place the unit in an inflammable gas environment.

To avoid danger of suffocation, keep the plastic packing bags away from babies and children.

Use the enclosed power cord and connect to the standard power outlet of your country.

Be sure to remain within the rated voltage of the power cord. Not doing so may result in fire or electric shock.

To disconnect the power cord, grasp the plug firmly and pull.

Tugging on the cord may damage and result in fire or electric shock.

The equipment must be connected to a grounded main outlet.

Not doing so may result in fire or electric shock.

Use the correct voltage.

- The unit is designed for use with a specific voltage only. Connection to another voltage than specified in this User's Manual may cause fire, electric shock, or equipment damage.
- Do not overload your power circuit, as this may result in fire or electric shock.

Handle the power cord with care.

- The unit is designed for use with a specific voltage only. Connection to another voltage than specified in this User's Manual may cause fire, electric shock, or equipment damage.
- Do not overload your power circuit, as this may result in fire or electric shock.

Never touch the plug and power cord if it begins to thunder.

Touching them may result in electric shock.

Do not touch a damaged LCD panel directly with bare hands.

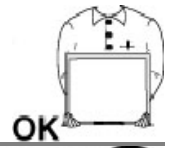
The liquid crystal that may leak from the panel is poisonous if it enters the eyes or mouth. If any part of the skin or body comes in direct contact with the panel, please wash thoroughly. If some physical symptoms result, please consult your doctor.

Follow local regulation or laws for safe disposal.

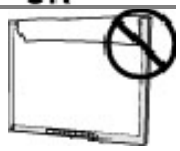
⚠CAUTION

Handle with care when carrying the unit.
Disconnect the power cord and signal cables and remove the optional unit. Moving the unit with the cord or the option attached is dangerous. It may result in injury.

When handling the unit, grip the bottom of the unit firmly with both hands ensuring the panel faces outward before lifting.
Dropping the unit may result in injury or equipment damage.



Do not block the ventilation slots on the cabinet.



- Do not place any objects on the ventilation slots.
- Do not install the unit in a closed space.
- Do not use the unit laid down or upside down.
- Blocking the ventilation slots prevents proper airflow and may result in fire, electric shock, or equipment damage.

Do not touch the plug with wet hands.
Doing so may result in electric shock.

Use an easily accessible power outlet.
This will ensure that you can disconnect the power quickly in case of a problem.

Periodically clean the area around the plug.
Dust, water, or oil on the plug may result in fire.

Unplug the unit before cleaning it.
Cleaning the unit while it is plugged into a power outlet may result in electric shock.

If you plan to leave the unit unused for an extended period, disconnect the power cord from the wall socket after turning off the power switch for the safety and the power conservation.

LCD PANEL

When the monitor is cold and brought into a room or the room temperature goes up quickly, dew condensation may occur inside and outside the monitor. In that case, do not turn the monitor on and wait until dew condensation disappears, otherwise it may cause some damages to it.

In order to suppress the luminosity change by long-term use and to maintain the stable luminosity, please use the monitor with the lower brightness.

The screen may have defective pixels. These pixels may appear as slightly light or dark area on the screen. This is due to the characteristics of the panel itself, and not the product.

The backlight of the LCD panel has a fixed life span. When the screen becomes dark or begins to flicker, please contact your dealer.

Do not press on the panel or edge of the frame strongly, as this may result in damage to the screen. There will be prints left on the screen if the pressed image is dark or black. If pressure is repeatedly applied to the screen, it may deteriorate or damage your LCD panel. Leave the screen white to decrease the prints.

Do not scratch or press on the panel with any sharp objects, such as a pencil or pen as this may result in damage to the panel. Do not attempt to brush with tissues as this may scratch the LCD panel.

When the screen image is changed after displaying the same image for extended periods of time, an afterimage may appear. Use the screen saver or timer to avoid displaying the same image for extended periods of time.

2. INTRODUCTION

Thank you very much for choosing this monitor.

2.1. Features

- VGA analog input
- DVI digital input compliant
- Resolutions up to 800×600
- Power management system conforms to VESA DPMS standard.
- Supports DDC1/2B for Plug & Play compatibility.
- Advanced On Screen Display (OSD) control for picture quality adjustment

2.2. Package Contents

Please contact your local dealer for assistance if any of the listed items are missing or damaged.

- LCD Monitor
- DVI Cable
- User Manual
- CD drive
- Power cable
- Power adapter

Note: Please retain the packing materials for future transference.

3. CABLE CONNECTION

3.1. Before Connecting

Before connecting your monitor to the computer, change the display screen settings (Resolution and frequency) in accordance with the charts below.

Note:

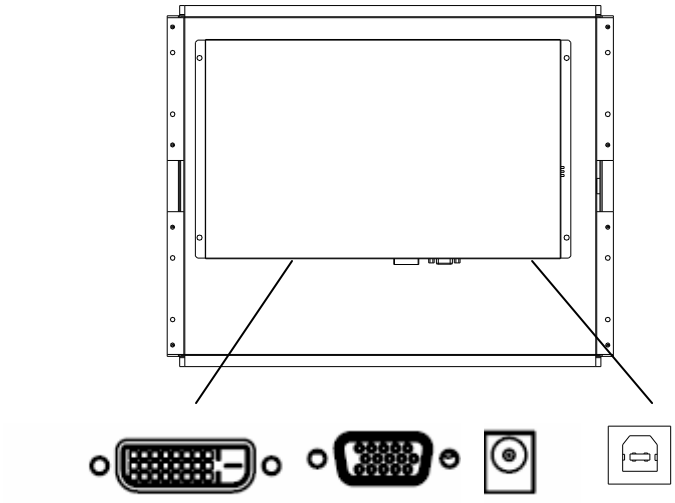
- The lower display modes like 640x 480, automatically enlarge to the maximum display mode (800x600), and some lines of the characters may become fuzzy.
- When your computer and display support VESA DDC, the suitable resolution and the refresh rate are set by just plugging your display into the computer without any manual settings.

The monitor supports the following resolutions.

Resolution	Refresh rate	Dot Frequency	Remark
640 x 480	60Hz	108MHz (Max.)	VGA
800 x 600	60Hz		VESA

3.2. Connecting the Cables

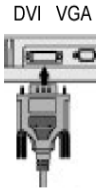
Note: Be sure that the power switches of both the computer and the monitor are OFF.



DVI **D-sub** **DC IN** **USB**

1 . Plug the DVI signal cable into the connector at the rear of the monitor and the other end of the cable into the connector on the PC. After connecting, secure the connection with the screw-in fasteners.

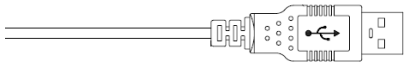
Signal Cable	Connector of Computer
DVI Signal Cable	DVI



2. Plug the VGA signal cable into the connector at the rear of the monitor and the other end of the cable into the connector on the PC. After connecting, secure the connection with the screw-in fasteners.

Signal Cable	Connector of Computer
D-sub Signal Cable	D-Sub 15pin

3. Connect end of the touchscreen USB cable to the rear side of the computer and the other end to the monitor.



4. Plug the power cord into the power connector on the rear of the monitor. Then, plug the other end of the cord into a power outlet.

4. INSTALLING THE DRIVER SOFTWARE

Drivers are located on the enclosed CD-ROM for the following operating systems:

- Windows XP
- Windows 2000
- Windows Me
- Windows 98
- Windows 95
- Windows NT 4.0

The touchmonitor is Plug-and-Play compliant. Information on the video capabilities of touchmonitor is sent to video display adapter when Windows starts. If Windows detects touchmonitor, follow the instructions on the screen to install a generic Plug-and-Play monitor.

Refer to the appropriate section for driver installation instructions.

Installing the USB Touch Driver for Windows XP, Windows 2000, Me, 95/98 and NT 4.0

1. Insert the CD-ROM in computer's CD-ROM drive.

If Windows 98, Windows Me or Windows 2000 Windows XP starts the Add New Hardware Wizard.

2. Choose **Next**. Select "Search for the best driver for your device (Recommended)" and choose **Next**.

3. When a list of search locations is displayed, place a checkmark on "Specify a location" and use **Browse** to select the suitable directory on the CD-ROM.

4. Choose **Next**. Once the USB touchscreen driver has been detected, choose **Next** again.

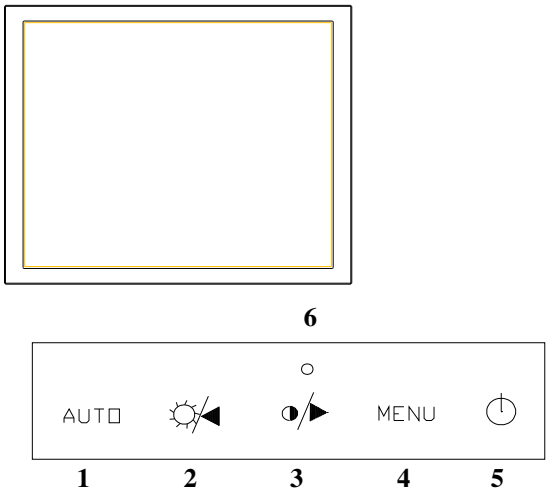
5. You will see several files being copied. Insert your Windows 98 CD if prompted. Choose **Finish**.

If Windows 98, Windows Me or Windows 2000 does not start the Add New Hardware Wizard.
NOTE: For Windows 2000 you must have administrator access rights to install the driver.
1. Put the CD into CD_ROM.
2. Choose the icon of TOUCHSCREEN driver.
3. Choose operation system for USB, eg. Window xp_X86.
4. Select SETUP.exe ,then run to install.
5. Select NEXT according to the prompt till installation finished.

5. ADJUSTMENT

This touchmonitor will not likely require adjustment. Variations in video output and application may require adjustments to the touchmonitor to optimize the quality of the display.
For best performance, the touchmonitor should be operating in native resolution 800 x 600. Use the Display control panel in Windows to choose 800 x 600 resolution. Operating in other resolutions will degrade video performance.
All control adjustments are automatically memorized.

5.1 How to Use OSD Menu



(1) Auto Button
(2) Control Button (Increasing)
(3) Control Button (Reduce)
(4) Menu/Enter Button
(5) Power On//Off Button
(6) Power Indicator

Power Indicator

Green	Operation
Orange	Closed
Off	Power Off

1. Entering the OSD Menu
Press the MENU Button once to display the OSD Menu.
2. Making Adjustments and Settings
a. Select the desired sub menu icon using the Control buttons and press the MENU button. The sub menu appears.
b. Use the Control buttons to select the desired setting icon and press the MENU button. The setting menu appears.
c. Use the Control buttons to make all required adjustments and press the MENU button to save the settings.

3. Exiting the OSD MENU

- To return to the main menu, select the <Return> icon and press the MENU button.
- To exit the OSD menu, select <Exit> icon .

5.2 OSD MENU Adjustments and Settings

The following table shows all adjustment and setting menus.

Main Menu	Sub Menu	Reference
Color Setting	Contrast	Set Screen Contrast
	Brightness	Set backlight Brightness
	Color Temp	Select color temperature 9300º K, 6500º K and User color, and set user color temperature
Image Setting	Auto Adjust	
	H-position	
	V-position	
	Clock	
	Phase	
LUT Setting	Gamma 1	Select display GAMMA
	Gamma 2	
	Gamma 3	
	Gamma 4	
	Gamma 5	
OSD Setting	OSD H-pos.	Set horizontal position of OSD Menu
	OSD V-pos.	Set vertical position of OSD Menu
	OSD Timer	Set display time of OSD Menu
Others	Signal Source	Select input signal
	Sharpness	Select the sharpness of image
	Reset	Reset to the default value
	Mode	Monitor mode

5.3 Screen Adjustment

Screen adjustments for the monitor should be used in suppressing screen flickering and also for adjusting the screen to its proper position. There is only one correct position for each display mode. It is also recommended to use the OSD Menu function when first installing the display or whenever changing the system.

Note: Allow the monitor to stabilize for at least 20 minutes before making image adjustments.

Adjustment Procedure

1. Adjust by <Auto Adjust> menu in the OSD Menu.

To automatically adjust the clock, phase, screen position and resolution.

Note:

The Auto sizing function is intended for use on the computer running Windows. It may not work properly when the computer is running on MS-DOS (Not windows) or the background color for the "wall paper" or "desktop" pattern is set to black.

If the appropriate screen cannot be made by using the Auto adjustment button, adjust the screen through the following procedures.

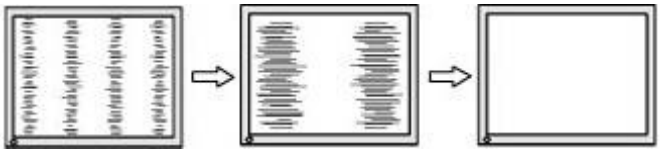
2. Adjust by using <Image Setting> menu in the OSD Menu.

(1) Vertical bars appear on the screen

→ Use the <Clock> adjustment.

Select the <Clock> and eliminate the vertical bars by using the UP and Down of the Control buttons.

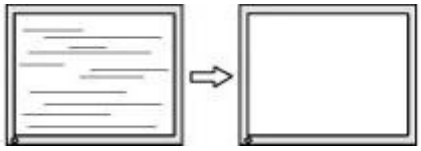
Do not continuously press the Control buttons, as the adjustment value will change quickly and make it difficult to locate the most suitable adjustment point. If the horizontal flickering, blur or bars appear, proceed to <Phase> adjustment as follows.



(2) Horizontal bars appear on the screen.

→ Use the <Phase> adjustment.

Select the <Phase> and eliminate the horizontal flickering, blurring or bars by using the Right and Left buttons.



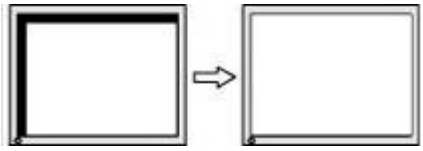
Note: Horizontal bars may not completely disappear from the screen depending on the computer.

(3) The screen position is incorrect.

→ Use the <Position> adjustment.

The <Position> adjustment moves the image to the correct position. Select <Position> and adjust the position by using the Up and Down buttons.

If vertical bars of distortion appear after finishing the <Position> adjustment, return to <Clock> adjustment and repeat the previously explained adjustment procedure. (Clock → Phase → Position)



6. ***TROUBLESHOOTING***

If a problem persists even after applying the suggested remedies, contact a dealer.

Problems	Points to check with Possible Solutions
1. No picture Indicator status: Off	Check that the power cord is correctly connected. If the problem persists, turn off the monitor power for a few minutes, then turn it back on and try again. - when the signal is not inputted correctly, even if the monitor functions properly. - When the image is displayed correctly after a short time, there is no problem with the monitor. (Some PCs do not output the signal soon after powering on.) Check that the signal cable is properly connected to the PC or graphics board.
Indicator status: Green	Check the "Brightness" setting.
2. Display position is incorrect. 	Adjust the image position using the <Position>. If the problem persists, use the graphics board's utility software to change the display position if available.
3. Vertical bars of distortion appear. 	Decrease the horizontal bars using the <Clock>.
4. Horizontal bars of distortion appear. 	Decrease the horizontal bars using the <Phase>.
5. The screen is too bright or too dark.	Adjust the <Brightness> (The backlight of the monitor has a fixed life span. When the screen becomes dark or begins to flicker, please contact your dealer.)
6. Afterimages appear.	- Do you use the screen saver or timer when displaying the same image for extended periods of time? - Afterimages are particular to monitors. Avoid displaying the same image for extended periods of time.
7. The screen has defective pixels (e.g. slightly light or dark).	This is due to the characteristics of the panel itself, and not the product.
8. Touch doesn't work.	Make sure the touch cable is securely attached at both ends.

7. CLEANING

Periodic cleaning is recommended to keep the monitor looking new and to prolong its operation lifetime.

Note: Never use thinner, benzene, alcohol (ethanol, methanol, or isopropyl alcohol), abrasive cleaners, or other strong solvents, as these may cause damage to the cabinet or LCD panel.

Cabinet

To remove stains, wipe the cabinet with a soft, lightly moistened cloth using a mild detergent. Do not spray wax or cleaner directly into the cabinet. (For details, refer to the manual of the PC.)

LCD Panel

The LCD surface can be cleaned with a soft cloth, such as cotton or lens paper.

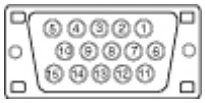
If necessary, stubborn stains can be removed by moistening part of a cloth with water to enhance its cleaning power.

8. SPECIFICATION

8.1 Touchmonitor Specification

Display characteristics Size:	8.4″ active display
Native resolution:	800 x600
Pixel pitch:	0.213 mm
Viewing angle:	120°(H)/100°(V)
Brightness:	250 cd/m2 Typ.
Contrast ratio:	400:1Typ.
Response time:	30 ms Typ.
External connections	
DVI Signal	DVI-D
Analog Video Input:	15 pin D-sub
Touchscreen Interface:	USB

8.2 D-Sub 15pin Connector



Pin	Signal	Pin	Signal	Pin	Signal
1	Red video	6	Red ground	11	Ground Shorted
2	Green video	7	Green ground	12	Data (SDA)
3	Blue video	8	Blue ground	13	H. Sync
4	Ground	9	No pin	14	V. Sync
5	No pin	10	Ground Shorted	15	Clock (SCL)

8.3 DVI-D Connector

Pin	Signal	Pin	Signal	Pin	Signal
1	TMDS Data 2-	9	TMDS Data 1-	17	TMDS Data 0-
2	TMDS Data 2+	10	TMDS Data 1+	18	TMDS Data 0+
3	TMDS Data 2/4 Shield	11	TMDS Data 1/3 Shield	19	TMDS Data 0/5 Shield
4	NC*	12	NC*	20	NC*
5	NC*	13	NC*	21	NC*
6	DDC Clock (SCL)	14	+5V Power	22	TMDS Clock shield
7	DDC Data (SDA)	15	Ground (For +5V)	23	TMDS Clock+
8	NC	16	Hot Plug Detect	24	TMDS Clock-

8.4 Preset Timing

Timing		Dot Clock MHz	Signal Polarity		Frequency	
			H	V	FH (kHz)	FV (Hz)
VGA	640×480	25.2	-	-	31.5	60.0
VESA	800×600	40.0	+	+	37.9	60.3

9. caveat emptor / Guarantee exclusion

Claims for defects do not exist in the following cases:

- natural wear and tear, and any damage, errors, reduced output or changes in the condition or function of our products that are due to external factors (e.g. blows, knocks, vibrations, water, fire), or due to improper storage, handling, assembly or any other improper use, or due to extreme climatic conditions, or to particular reception or operating conditions at the location where the item is used;
- defects due to constructional errors or material defects, insofar as the customer has prescribed the construction or the material;
- burn-in on the LCD panel caused by permanent display and spots forming on the LCD panel

10. Vendor:

Europe:
Canvys
A Division of Richardson Electronics GmbH
Raiffeisenstraße 5
D-78166 Donaueschingen

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